

REMARKS

Pursuant to the requirements of 37 C.F.R. §§ 1.821-1.825, Applicants submit the enclosed Sequence Listing and computer readable form (CRF). The amino acid sequences disclosed in the claims may be found in computer readable form in file 002214.txt on the enclosed diskette and are presented in the paper copy of the Sequence Listing, enclosed.

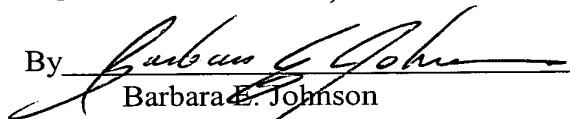
Applicants hereby certify that the information recorded in computer readable form (CRF) supplied on the enclosed diskette as file 001252.txt is identical to the written Sequence Listing. The material presented in computer readable form is not new matter because it presents sequences the same as those disclosed in the original set of claims, as filed.

Applicants believe that the requirements of 37 C.F.R. §§ 1.821-1.825 have been met.

Respectfully submitted,

WEBB ZIESENHEIM LOGSDON
ORKIN & HANSON, P.C.

By



Barbara E. Johnson
Registration No. 31,198
Attorney for Applicants
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818
Telephone: 412-471-8815
Facsimile: 412-471-4094



MARKED UP AMENDED CLAIM 3


3. (Twice Amended) Medicament according to claim 1, wherein the polycationic peptide or protein is selected from the group consisting essentially of:

- human lactoferrin, bovine lactoferrin, lactoferrin, conalbumin (ovotransferrin), the polycationic peptides occurring in these proteins, hydrolysates of lactoferrin, and cation rich peptides originating from lactoferrin;


- poly-peptide having an amino acid sequence selected from the following sequences (1) – (15), or derivatives thereof having an amide at the carboxy end thereof:

- (1) Arg-Trp-Gln-Trp-Arg; (SEQ ID NO: 1)
- (2) Arg-Arg-Gln-Trp-Arg; (SEQ ID NO: 2)
- (3) Lys-Val-Ser-Trp-Arg; (SEQ ID NO: 3)
- (4) Arg-Asn-Met-Arg-Lys; (SEQ ID NO: 4)
- (5) Arg-Trp-Gln-Glu-Lys; (SEQ ID NO: 5)
- (6) Arg-Arg-Trp-Gln-Trp-Arg; (SEQ ID NO: 6)
- (7) Arg-Arg-Arg-Gln-Trp-Arg; (SEQ ID NO: 7)
- (8) Lys-Thr-Val-Ser-Trp-Arg; (SEQ ID NO: 8)
- (9) Lys-Arg-Asn-Met-Arg-Lys; (SEQ ID NO: 9)
- (10) Arg-Trp-Gln-Glu-Met-Lys; (SEQ ID NO: 10)
- (11) Lys-Thr-Arg-Arg-Trp-Gln-Trp-Arg-Met-Lys-Lys; (SEQ ID NO: 11)
- (12) Lys-Ser-Arg-Arg-Arg-Gln-Trp-Arg-Met-Lys-Lys; (SEQ ID NO: 12)
- (13) Lys-Thr-Val-Ser-Trp-Gln-Thr-Tyr-Met-Lys-Lys; (SEQ ID NO: 13)
- (14) Lys-Thr-Phe-Gln-Trp-Gln-Arg-Asn-Met-Arg-Lys; (SEQ ID NO: 14)
- (15) Lys-Thr-Leu-Arg-Trp-Gln-Asn-Glu-Met-Arg-Lys; (SEQ ID NO: 15)

a peptide containing one of the following amino acid sequences (a), (b), (c), or (d):




 Lys-Cys-Arg-Arg-Trp-Gln-Trp-Arg-Met-Lys-Lys-Leu-Gly-Ala-

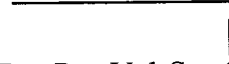


 Pro-Ser-Ile-Thr-Cys-Val; (a) (SEQ ID NO: 16)

-Lys-Cys*-Arg-Arg-Trp-Gln-Trp-Arg-Met-Lys-Lys-Leu-Gly-
 Ala-Pro-Ser-Ile-Thr-Cys*-Val; (b) (SEQ ID NO: 17)



 Lys-Cys-Phe-Gln-Trp-Gln-Arg-Asn-Met-Arg-Lys-Val-Arg-Gly-



 Pro-Pro-Val-Ser-Cys-Ile; (c) (SEQ ID NO: 18)

-Lys-Cys*-Phe-Gln-Trp-Gln-Arg-Asn-Met-Arg-Lys-Val-Gly-
 Pro-Pro-Val-Ser-Cys*-Ile; (b) (SEQ ID NO: 19)

where Cys* represents cysteine in which the thiol group is blocked in order to prevent disulfide bond formation; and mixtures thereof and pharmaceutically and sitologically acceptable salts thereof;

- a peptide consisting of one of the following specific amino acid sequences (a)-(l) or derivatives thereof having an amide at the carboxy end thereof:

(a) Phe-Gln-Trp-Gln-Arg-Asn (SEQ ID NO: 20)

(b) Phe-Gln-Trp-Gln-Arg (SEQ ID NO: 21)

(c) Gln-Trp-Gln-Arg (SEQ ID NO: 22)

(d) Trp-Gln-Arg

(e) Arg-Arg-Trp-Gln-Trp (SEQ ID NO: 23)

(f) Arg-Arg-Trp-Gln (SEQ ID NO: 24)

(g) Trp-Gln-Trp-Arg (SEQ ID NO: 25)

(h) Gln-Trp-Arg

(i) Leu-Arg-Trp-Gln-Asn-Asp (SEQ ID NO: 26)

(j) Leu-Arg-Trp-Gln-Asn (SEQ ID NO: 27)

(k) Leu-Arg-Trp-Gln (SEQ ID NO: 28)

(l) Arg-Trp-Gln

and lactoferrin hydrolyzate for the manufacture of antibacterial agent, and chemical derivatives thereof, wherein by the derivatives, the polarity of the amino group of the amino acid residue constituting the protein is chemically modified into a negative moiety;

- polycations belonging to the family of α or β defensins, such as magainins, cecropins type A or B, protegrins, indolicidin analogs, polycations isolatable from insects, and histones:

- mixtures thereof; and

-pharmaceutically and cytologically acceptable salts of this group.